

Hans A Heus

List of Publications by Year in descending order

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77
papers

4,038
citations

168829

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62
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78
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docs citations

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times ranked

4167
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Improving Breast Cancer Treatment Specificity Using Aptamers Obtained by 3D Cell-SELEX. <i>Pharmaceuticals</i> , 2021, 14, 349. | 1.7 | 16 |
| 2 | Multivalent Sgc8c-aptamer decorated polymer scaffolds for leukemia targeting. <i>Chemical Communications</i> , 2021, 57, 2744-2747. | 2.2 | 12 |
| 3 | Ramified rolling circle amplification for synthesis of nucleosomal DNA sequences. <i>Analytical Biochemistry</i> , 2020, 588, 113469. | 1.1 | 12 |
| 4 | Transcription and Translation in Cytomimetic Protocells Perform Most Efficiently at Distinct Macromolecular Crowding Conditions. <i>ACS Synthetic Biology</i> , 2020, 9, 2797-2807. | 1.9 | 39 |
| 5 | Dissipative adaptation in driven self-assembly leading to self-dividing fibrils. <i>Nature Nanotechnology</i> , 2018, 13, 849-855. | 15.6 | 160 |
| 6 | Biomimetic Stress Sensitive Hydrogel Controlled by DNA Nanoswitches. <i>Biomacromolecules</i> , 2017, 18, 3310-3317. | 2.6 | 31 |
| 7 | A membrane-anchored aptamer sensor for probing IFN β secretion by single cells. <i>Chemical Communications</i> , 2017, 53, 8066-8069. | 2.2 | 58 |
| 8 | DNA-Responsive Polyisocyanopeptide Hydrogels with Stress-Stiffening Capacity. <i>Advanced Functional Materials</i> , 2016, 26, 9075-9082. | 7.8 | 42 |
| 9 | Stable isotope labeling methods for DNA. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2016, 96, 89-108. | 3.9 | 15 |
| 10 | Protein Synthesis in Coupled and Uncoupled Cell-Free Prokaryotic Gene Expression Systems. <i>ACS Synthetic Biology</i> , 2016, 5, 1433-1440. | 1.9 | 17 |
| 11 | Cell-Like Nanostructured Environments Alter Diffusion and Reaction Kinetics in Cell-Free Gene Expression. <i>ChemBioChem</i> , 2016, 17, 228-232. | 1.3 | 18 |
| 12 | Macromolecular crowding creates heterogeneous environments of gene expression in picolitre droplets. <i>Nature Nanotechnology</i> , 2016, 11, 191-197. | 15.6 | 123 |
| 13 | Macromolecular Crowding in the Cytosol: Underappreciated or Overestimated?. <i>Biophysical Journal</i> , 2015, 108, 114a. | 0.2 | 0 |
| 14 | Enzymatic preparation of multimilligram amounts of pure single-stranded DNA samples for material and analytical sciences. <i>Analytical Biochemistry</i> , 2015, 475, 68-73. | 1.1 | 17 |
| 15 | Associative Interactions in Crowded Solutions of Biopolymers Counteract Depletion Effects. <i>Journal of the American Chemical Society</i> , 2015, 137, 13041-13048. | 6.6 | 55 |
| 16 | Production of Homogeneous Recombinant RNA Using a tRNA Scaffold and Hammerhead Ribozymes. <i>Methods in Molecular Biology</i> , 2015, 1316, 33-44. | 0.4 | 1 |
| 17 | DNA-functionalized hydrogels for confined membrane-free in vitro transcription/translation. <i>Lab on A Chip</i> , 2014, 14, 2651. | 3.1 | 44 |
| 18 | Structural and thermodynamic signatures that define pseudotriple RNA hairpins. <i>Rna</i> , 2013, 19, 1833-1839. | 1.6 | 7 |

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|----|--|-----|-----------|
| 19 | Enhanced transcription rates in membrane-free protocells formed by coacervation of cell lysate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 11692-11697. | 3.3 | 282 |
| 20 | Fast production of homogeneous recombinant RNA towards large-scale production of RNA. <i>Nucleic Acids Research</i> , 2012, 40, e102-e102. | 6.5 | 54 |
| 21 | Force spectroscopy of Rev-peptide-RRE interaction from HIV-1. <i>Soft Matter</i> , 2012, 8, 2103-2109. | 1.2 | 8 |
| 22 | Unusual Loop-Sequence Flexibility of the Proximal RNA Replication Element in EMCV. <i>PLoS ONE</i> , 2011, 6, e24818. | 1.1 | 2 |
| 23 | Atomic force microscope-based single-molecule force spectroscopy of RNA unfolding. <i>Analytical Biochemistry</i> , 2011, 414, 1-6. | 1.1 | 27 |
| 24 | Network theory approach for data evaluation in the dynamic force spectroscopy of biomolecular interactions. <i>Europhysics Letters</i> , 2010, 89, 68004. | 0.7 | 2 |
| 25 | ¹ H and ¹³ C resonance assignments of a guanine sensing riboswitch's terminator hairpin. <i>Biomolecular NMR Assignments</i> , 2010, 4, 89-91. | 0.4 | 1 |
| 26 | Enzymatic stereospecific preparation of fluorescent S-adenosyl-l-methionine analogs. <i>Analytical Biochemistry</i> , 2010, 396, 280-283. | 1.1 | 29 |
| 27 | Functional analysis of the SRV-1 RNA frameshifting pseudoknot. <i>Nucleic Acids Research</i> , 2010, 38, 7665-7672. | 6.5 | 24 |
| 28 | Preparation of selective and segmentally labeled single-stranded DNA for NMR by self-primed PCR and asymmetrical endonuclease double digestion. <i>Nucleic Acids Research</i> , 2009, 37, e114-e114. | 6.5 | 10 |
| 29 | The structure-function relationship of the enterovirus 3'-UTR. <i>Virus Research</i> , 2009, 139, 209-216. | 1.1 | 59 |
| 30 | Cartilage hair hypoplasia-associated mutations in the RNase MRP P3 domain affect RNA folding and ribonucleoprotein assembly. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2008, 1783, 455-466. | 1.9 | 25 |
| 31 | Multiple segmental and selective isotope labeling of large RNA for NMR structural studies. <i>Nucleic Acids Research</i> , 2008, 36, e89-e89. | 6.5 | 45 |
| 32 | Breaking pseudo-twofold symmetry in the poliovirus 3'-UTR Y-stem by restoring Watson-Crick base pairs. <i>Rna</i> , 2007, 13, 781-792. | 1.6 | 14 |
| 33 | Ligand-induced folding of the guanine-sensing riboswitch is controlled by a combined predetermined-induced fit mechanism. <i>Rna</i> , 2007, 13, 2202-2212. | 1.6 | 75 |
| 34 | An RNA conformational shift in recent H5N1 influenza A viruses. <i>Bioinformatics</i> , 2007, 23, 272-276. | 1.8 | 38 |
| 35 | Nonspecific Protein Adsorption at the Single Molecule Level Studied by Atomic Force Microscopy. <i>Langmuir</i> , 2007, 23, 9921-9923. | 1.6 | 35 |
| 36 | Macroscopic Hierarchical Surface Patterning of Porphyrin Trimers via Self-Assembly and Dewetting. <i>Science</i> , 2006, 314, 1433-1436. | 6.0 | 311 |

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|----|--|-----|-----------|
| 37 | Chemical synthesis of picornaviral protein primers of RNA replication. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 3576. | 1.5 | 11 |
| 38 | Structural and functional integrity of the coxsackievirus B3 oriR: spacing between coaxial RNA helices. <i>Journal of General Virology</i> , 2006, 87, 689-695. | 1.3 | 15 |
| 39 | A GCUA tetranucleotide loop found in the poliovirus oriL by in vivo SELEX (un)expectedly forms a YNMG-like structure: Extending the YNMG family with GYYA. <i>Rna</i> , 2006, 12, 1671-1682. | 1.6 | 16 |
| 40 | AFM Studies of β -Sheet Block Copolymers at Solid Surfaces: High-Resolution Structures and Aggregation Dynamics. <i>Australian Journal of Chemistry</i> , 2006, 59, 560. | 0.5 | 1 |
| 41 | Structures of Non-Canonical Tandem Base Pairs in RNA Helices: Review. <i>ChemInform</i> , 2004, 35, no. | 0.1 | 0 |
| 42 | Novel application of sRNA: Stimulation of ribosomal frameshifting. <i>Rna</i> , 2004, 10, 1702-1703. | 1.6 | 30 |
| 43 | Structures of Non-canonical Tandem Base Pairs in RNA Helices: Review. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2003, 22, 559-571. | 0.4 | 14 |
| 44 | Structure of the Pyrimidine-rich Internal Loop in the Poliovirus 3' UTR: The Importance of Maintaining Pseudo-2-fold Symmetry in RNA Helices Containing Two Adjacent Non-canonical Base-pairs. <i>Journal of Molecular Biology</i> , 2003, 331, 759-769. | 2.0 | 20 |
| 45 | Solution structure of the pseudoknot of SRV-1 RNA, involved in ribosomal frameshifting 1 Edited by I. Tinoco. <i>Journal of Molecular Biology</i> , 2001, 310, 1109-1123. | 2.0 | 102 |
| 46 | Title is missing!. <i>Helvetica Chimica Acta</i> , 2000, 83, 1278-1289. | 1.0 | 14 |
| 47 | Solution structure of a HNA-RNA hybrid. <i>Chemistry and Biology</i> , 2000, 7, 719-731. | 6.2 | 66 |
| 48 | Structure of the ribozyme substrate hairpin of <i>Neurospora</i> VS RNA: A close look at the cleavage site. <i>Rna</i> , 2000, 6, 1821-1832. | 1.6 | 43 |
| 49 | Title is missing!. <i>Journal of Biomolecular NMR</i> , 1998, 12, 423-433. | 1.6 | 16 |
| 50 | Structure of the 3'-hairpin of the TYMV pseudoknot: preformation in RNA folding. <i>EMBO Journal</i> , 1998, 17, 7498-7504. | 3.5 | 11 |
| 51 | New developments in structure determination of pseudoknots. <i>Biopolymers</i> , 1998, 48, 137-153. | 1.2 | 48 |
| 52 | NMR Structure of a Classical Pseudoknot: Interplay of Single- and Double-Stranded RNA. <i>Science</i> , 1998, 280, 434-438. | 6.0 | 148 |
| 53 | The detailed structure of tandem G:A mismatched base-pair motifs in RNA duplexes is context dependent. <i>Journal of Molecular Biology</i> , 1997, 271, 147-158. | 2.0 | 53 |
| 54 | RNA aptamers. <i>Nature Structural Biology</i> , 1997, 4, 597-600. | 9.7 | 14 |

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|----|--|-----|-----------|
| 55 | The structure of the isolated, central hairpin of the HDV antigenomic ribozyme: novel structural features and similarity of the loop in the ribozyme and free in solution. <i>EMBO Journal</i> , 1997, 16, 3685-3692. | 3.5 | 24 |
| 56 | Unambiguous Structure Characterization of a DNA~RNA Triple Helix by 15N- and 13C-Filtered NOESY Spectroscopy. <i>Biochemistry</i> , 1996, 35, 1733-1739. | 1.2 | 15 |
| 57 | A Network of Heterogeneous Hydrogen Bonds in GNRA Tetraloops. <i>Journal of Molecular Biology</i> , 1996, 264, 968-980. | 2.0 | 360 |
| 58 | Sequential backbone assignment of uniformly 13C-labeled RNAs by a two-dimensional P(CC)H-TOCSY triple resonance NMR experiment. <i>Journal of Biomolecular NMR</i> , 1995, 5, 82-86. | 1.6 | 38 |
| 59 | Irradiated [15N]DNA as an Internal Standard for Analysis of Base-Oxidized DNA Constituents by Isotope Dilution Mass Spectrometry. <i>Analytical Chemistry</i> , 1995, 67, 399-404. | 3.2 | 5 |
| 60 | Assignment Strategies and Analysis of Cross-Peak Patterns and Intensities in the Three-Dimensional Homonuclear TOCSY-NOESY of RNA. <i>Journal of Magnetic Resonance Series B</i> , 1994, 103, 134-141. | 1.6 | 28 |
| 61 | Sequential Backbone Assignment in 13C-Labeled RNA via Through-Bond Coherence Transfer Using Three-Dimensional Triple Resonance Spectroscopy (1H,13C,31P) and Two-Dimensional Hetero TOCSY. <i>Journal of the American Chemical Society</i> , 1994, 116, 4983-4984. | 6.6 | 59 |
| 62 | Novel proton NMR assignment procedure for RNA duplexes. <i>Journal of the American Chemical Society</i> , 1991, 113, 4360-4361. | 6.6 | 49 |
| 63 | Nuclear magnetic resonance studies of the hammerhead ribozyme domain. <i>Journal of Molecular Biology</i> , 1991, 217, 113-124. | 2.0 | 110 |
| 64 | Structural features that give rise to the unusual stability of RNA hairpins containing GNRA loops. <i>Science</i> , 1991, 253, 191-194. | 6.0 | 649 |
| 65 | Conformational and thermodynamic effects of naturally occurring base methylations in a ribosomal RNA hairpin of <i>Bacillus stearothermophilus</i> . <i>FEBS Journal</i> , 1990, 188, 275-281. | 0.2 | 9 |
| 66 | Sequence-dependent structural variations of hammerhead RNA enzymes. <i>Nucleic Acids Research</i> , 1990, 18, 1103-1108. | 6.5 | 80 |
| 67 | Is there a special function for U ~ G basepairs in ribosomal RNA?. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1990, 1050, 14-17. | 2.4 | 20 |
| 68 | The 3' Terminal Colicin Fragment of <i>Escherichia coli</i> 16S Ribosomal RNA. Conformational Details Revealed by Enzymic and Chemical Probing. <i>Journal of Biomolecular Structure and Dynamics</i> , 1988, 5, 951-963. | 2.0 | 3 |
| 69 | [12] Isolation and characterization of colicin fragments of bacterial 16S ribosomal RNA. <i>Methods in Enzymology</i> , 1988, 164, 188-200. | 0.4 | 0 |
| 70 | Circular dichroism and 500-MHz proton magnetic resonance studies of the interaction of <i>Escherichia coli</i> translational initiation factor 3 protein with the 16S ribosomal RNA 3' cloacin fragment. <i>Biochemistry</i> , 1986, 25, 2770-2777. | 1.2 | 23 |
| 71 | Phylogeny of the conserved 3' terminal structure of the RNA of small ribosomal subunits. <i>Nucleic Acids Research</i> , 1984, 12, 2595-2604. | 6.5 | 97 |
| 72 | High-resolution proton magnetic resonance studies of the 3'-terminal colicin fragment of 16 S ribosomal RNA from <i>Escherichia coli</i> . <i>Journal of Molecular Biology</i> , 1983, 170, 939-956. | 2.0 | 31 |

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|----|---|-----|-----------|
| 73 | The Conformation of a Conserved Stem-Loop Structure in Ribosomal RNA. Journal of Biomolecular Structure and Dynamics, 1983, 1, 371-381. | 2.0 | 9 |
| 74 | Calorimetric measurements of the destabilisation of a ribosomal RNA hairpin by dimethylation of two adjacent adenosines. Nucleic Acids Research, 1983, 11, 203-210. | 6.5 | 21 |
| 75 | 16S Ribosomal RNA of Escherichia coli contains a N2-methylguanosine at 27 nucleotides from the 3' end. Nucleic Acids Research, 1981, 9, 2717-2725. | 6.5 | 25 |
| 76 | Destabilization of secondary structure in 16S ribosomal RNA by dimethylation of two adjacent adenosines. Nucleic Acids Research, 1981, 9, 4413-4422. | 6.5 | 31 |
| 77 | Adenosine dimethylation of 16S ribosomal RNA: effect of the methylgroups on local conformational stability as deduced from electrophoretic mobility of RNA fragments in denaturing polyacrylamide gels. Nucleic Acids Research, 1981, 9, 267-275. | 6.5 | 21 |